

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently Amended): A process for preparation of a catalyst, said catalyst comprising zinc aluminate and having the formula:



whereby x and y are between 0 and 2, said process successively comprising:

- A stage (a) mixing with water and nitric acid the amount of zinc oxide that is necessary for formation of said catalyst, in which ~~at least a portion~~ 10-50% of the zinc oxide is replaced by an equivalent amount of at least one zinc nitrate or carbonate;
- A stage (b) mixing the mixture that was previously obtained with an alumina gel that ~~is~~ has been peptized in the presence of a water/nitric acid mixture, so as to form a paste;
- A stage (c) extruding under pressure the paste that is obtained from stage (b);
- A stage (d) drying the extruded paste is dried in two successive phases, the first at a temperature of less than 100°C, and the second at a temperature of at least 100°C;
- and a stage (e) calcining the extruded and dried paste.

Claim 2 (Previously Presented): The process according to claim 1, wherein stage (a) is carried out over 30 and 60 minutes in a container that is equipped with a stirring mechanism until the consistency of a thick cream is achieved.

Claim 3 (Previously Presented): The process according to claim 1, wherein mixing stage (b) is carried out in a mixer-extruder.

Claim 4 (Previously Presented): The process according to claim 3, wherein in stage (b),

the alumina gel to which the mixture of zinc salt, optionally zinc oxide, and water/nitric acid is added is introduced in a first step, whereby the mixing time is between 60 and 120 minutes.

Claim 5 (Previously Presented): The process according to claim 3, wherein during the mixing, the temperature gradually rises to reach a value of between 60 and 65°C.

Claim 6 (Previously Presented): The process according to claim 3, wherein water is added during the mixing to reach a suitable consistency of the paste.

Claim 7 (Previously Presented): The process according to claim 1, wherein stage (c) the paste that is obtained is extruded from a die with a diameter of between 1.5 and 3.7 mm of diameter.

Claim 8 (Previously Presented): The process according to claim 7, wherein in stage (c), a pressure of higher than 2 MPa is exerted on the die so as to obtain compact extrudates that have a flawless surface.

Claim 9 (Previously Presented): The process according to claim 7, wherein when, at the end of extrusion, the pressure again becomes less than 2 MPa and, the recovered extrudates are not preserved.

Claim 10 (Previously Presented): The according to claim 1, wherein drying stage (d) is carried out in a ventilated oven.

Claim 11 (Previously Presented): The process according to claim 10, wherein said first drying phase is operated at about 80°C for 3 hours, then said second drying phase is operated in two stages, at 100°C for about 2 hours and then at about 150°C for about 2 hours.

Claim 12 (Previously Presented): The process according to claim 1, wherein stage (e) is carried out at a temperature of between 400 and 700°C for a period of between 2 and 4 hours.

Claim 13 (Previously Presented): The process according to claim 12, wherein stage (e) is carried out at a temperature of about 700°C for about 2 hours with a temperature rise gradient encompassed between 3 and 6°C/minute.

Claim 14 (Previously Presented): A catalyst that comprises zinc aluminate and that corresponds to the formula:



whereby x and y are encompassed between 0 and 2, obtained by a process according to claim 1.

Claim 15 (Previously Presented): The catalyst according to claim 14, having a residual zinc oxide content, measured by X-ray diffraction, less than 2% by mass.

Claim 16 (Currently Amended): A process for preparation of a catalyst, said catalyst comprising zinc aluminate and having the formula:



whereby x and y are between 0 and 2, said process successively comprising:

mixing an alumina gel with a mixture of zinc oxide and 10-50%, based on total zinc, of a zinc carbonate or nitrate, and optionally extruding, drying and calcining a resultant paste.

Claim 17 (Currently Amended): A process according to claim 1, wherein ~~at least 33%~~ 25-40% of zinc oxide is replaced by zinc nitrate or carbonate.

Claim 18 (Currently Amended): A process according to claim 16, wherein at least ~~50%~~ 25-40% of zinc oxide is replaced by zinc nitrate or carbonate.

Claim 19 (Previously Presented): A catalyst that comprises zinc aluminate and that corresponds to the formula:



whereby x and y are encompassed between 0 and 2, obtained by a process according to claim 17.

Claim 20 (Canceled)

Claim 21 (New): A process for preparation of a catalyst, said catalyst comprising zinc aluminate and having the formula:



whereby x and y are between 0 and 2, said process successively comprising:

mixing an alumina gel with a mixture of zinc oxide and 10-50%, based on total zinc, of zinc nitrate, and optionally extruding, drying and calcining a resultant paste.